RICHMOND METROPOLITAN TRANSPORTATION AUTHORITY

RICHMOND EXPRESSWAY SYSTEM

CONTRACT NO. PC.-2018

PROTECTIVE COATINGS OF

STRUCTURES

ADDENDUM NO. 2 January 25, 2018

DESCRIPTION

The attached pages are issued to amend, and become part of, the Contract Documents.

Contractor shall acknowledge receipt of this Addendum on the Receipt of Addenda form (Contract Page RA-1). Failure to complete and include the RA-1 form in the bid package may cause bid to be found irregular.

Date of receipt of bids is unchanged.

Date of contract completion is unchanged.

PC-2018 BID TAB

1. All Bidders are directed to replace Pages: P-2 and P-3 from the Bid Documents with Addendum No. 2 Pages: P-2 and P-3.

ADDENDUM NO. 2 1/25/18 RA2-1 2. This addendum has been issued to add ITEMS NO. 18-21 to the PC-2018 Bid Tab for the Interior Box Girder Coating on RMTA Bridge No.'s 65, 66, 67 and 68. The UNIT for ITEMS NO. 18-21 is Lump Sum.

SPECIAL PROVISION BRIDGE REPAIRS SP-C

- 1. All Bidders are directed to replace Pages: SP-C-1, SP-C-2, SP-C-3, SP-C-4, SP-C-5 and SP-C-6 from the Bid Documents with Addendum No. 2 Pages SP-C-1, SP-C-2, SP-C-3, SP-C-4, SP-C-5 and SP-C-6. Bidders are directed to add page SP-Ct Interior Box Girders paint estimated quantities.
- 2. This addendum has been issued to add cleaning in accordance with SSPC SP-6 "Commercial Blast" to Interior Box Girders on RMTA Bridge No.'s 65, 66, 67 and 68. All Interior Box Girders will receive a two-coat system.

PC-2018 BID TAB

) (INSERT BIDDER FIRM NAME HERE)
/

ITEM NO.	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT	SPECIFICATION
1	MOBILIZATION	L.S.	1			513
2	ELECTRONIC ARROW	HR.	450			512
3	GROUP 2 CHANNELIZING DEVICES	DAY	1,300			512
4	TRUCK MOUNTED ATTENUATOR	HR.	450			512
5	FLAGGER SERVICE	HR.	500			512
6	MAINTENANCE OF TRAFFIC, BRIDGE 63	L.S.	1			512
7	MAINTENANCE OF TRAFFIC, BRIDGE 64	L.S.	1			512
8	MAINTENANCE OF TRAFFIC, BRIDGE 65	L.S.	1			512
9	MAINTENANCE OF TRAFFIC, BRIDGE 66	L.S.	1			512
10	MAINTENANCE OF TRAFFIC, BRIDGE 67	L.S.	1			512
11	MAINTENANCE OF TRAFFIC, BRIDGE 68	L.S.	1			512
12	FULL BRIDGE COATING (BRIDGE 63, TYPE B)	L.S.	1			231 / 411 / ATTD.
13	FULL BRIDGE COATING (BRIDGE 64, TYPE B)	L.S.	1			231 / 411 / ATTD.
14	FULL BRIDGE COATING (BRIDGE 65, TYPE B)	L.S.	1			231 / 411 / ATTD.
15	FULL BRIDGE COATING (BRIDGE 66, TYPE B)	L.S.	1			231 / 411 / ATTD.
16	FULL BRIDGE COATING (BRIDGE 67, TYPE B)	L.S.	1			231 / 411 / ATTD.
17	FULL BRIDGE COATING (BRIDGE 68, TYPE B)	L.S.	1			231 / 411 / ATTD.
18	INTERIOR BOX GIRDER COATING (BRIDGE 65, TYPE B)	L.S.	1			231 / 411 / ATTD.
19	INTERIOR BOX GIRDER COATING (BRIDGE 66, TYPE B)	L.S.	1			231 / 411 / ATTD.
20	INTERIOR BOX GIRDER COATING (BRIDGE 67, TYPE B)	L.S.	1			231 / 411 / ATTD.
21	INTERIOR BOX GIRDER COATING (BRIDGE 68, TYPE B)	L.S.	1			231 / 411 / ATTD.
22	ENVIRONMENTAL PROTECTION AND HEALTH SAFETY (BRIDGE 63, TYPE B)	L.S.	1			411
23	ENVIRONMENTAL PROTECTION AND HEALTH SAFETY (BRIDGE 64, TYPE B)	L.S.	1			411

PC-2018 BID TAB

ITEM NO.	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT	SPECIFICATION
_	ENVIRONMENTAL PROTECTION AND HEALTH SAFETY					
24	(BRIDGE 65, TYPE B)	L.S.	1			411
25	ENVIRONMENTAL PROTECTION AND HEALTH SAFETY (BRIDGE 66, TYPE B)	L.S.	1			411
20	ENVIRONMENTAL PROTECTION AND HEALTH SAFETY	L.O.	'			711
26	(BRIDGE 67, TYPE B)	L.S.	1			411
27	ENVIRONMENTAL PROTECTION AND HEALTH SAFETY (BRIDGE 68, TYPE B)	L.S.	1			411
28	DISPOSAL OF MATERIAL (BRIDGE 63, TYPE B)	L.S.	1			411
29	DISPOSAL OF MATERIAL (BRIDGE 64, TYPE B)	L.S.	1			411
30	DISPOSAL OF MATERIAL (BRIDGE 65, TYPE B)	L.S.	1			411
31	DISPOSAL OF MATERIAL (BRIDGE 66, TYPE B)	L.S.	1			411
32	DISPOSAL OF MATERIAL (BRIDGE 67, TYPE B)	L.S.	1			411
33	DISPOSAL OF MATERIAL (BRIDGE 68, TYPE B)	L.S.	1			411
34	RAILWAY COORDINATION SERVICE (BRIDGE 63, SPAN 23)	L.S.	1			ATTD
35	RAILWAY COORDINATION SERVICE (BRIDGE 64, SPANS 2, 9)	L.S.	1			ATTD
36	RAILWAY COORDINATION SERVICE (BRIDGE 65, SPAN 10, 13)	L.S.	1			ATTD
37	RAILWAY COORDINATION SERVICE (BRIDGE 67, SPANS 1,7,8,10)	L.S.	1			ATTD
38	RAILWAY COORDINATION SERVICE (BRIDGE 68, SPANS 1, 4, 7)	L.S.	1			ATTD
39	PARAPET WALL COATING	S.Y.	4,555			ATTD
40	MISCELLANEOUS COATING	S.F.	1,100			411 / ATTD

	Total
(SIGN HERE)	(INSERT HERE)
Signature of Owner, Partner, or Corporate Officer:	Title:

SPECIAL PROVISION BRIDGE FULL COATING

DESCRIPTION

This work shall consist of cleaning and coating all the structural steel surfaces of each Bridge. The intent is to re-coat all structural members which exhibit corrosion and possible minor section loss. Steel surfaces proposed to be coated include girders, diaphragms, and bearing assemblies.

Structures are assumed to be Type B structures unless otherwise noted. Procedures and regulations for preparing and coating steel surfaces, recommended coating systems, required environmental protection and measurement and payment are provided in the VDOT Specification Sections 231 and 411.

The as-built framing and deck plans of these bridges are provided in the Appendix for Contractor's reference. Vertical Clearances are as shown on the as-built plans in the Appendix.

Estimates of the individual bridge square footage areas proposed to be cleaned and coated and are provided in the subsequent pages of this Special Provision. Please note that the provided square footage quantities are estimates only, and that no claim for extra payment or minimized work scope shall be accepted based on these estimates.

MATERIALS

All abrasive blast cleaned exterior surfaces shall receive the following three coat zinc, epoxy & urethane system or engineer approved equal:

- CARBOZINC 859 Zinc Rich Epoxy Primer 3-5 mils D.F.T.
- CARBOGUARD 893 High Solids Epoxy 4-6 mils D.F.T.
- CARBOTHANE 133 Satin Acrylic-Polyester Polyurethane 3-5 D.F.T.

All abrasive blast cleaned **Interior Box Girder** surfaces shall receive the following <u>two coat</u> zinc & epoxy system or engineer approved equal:

- CARBOZINC 859 Zinc Rich Epoxy Primer 3-5 mils D.F.T.
- CARBOGUARD 893 High Solids Epoxy 4-6 mils D.F.T.

SCOPE OF WORK

Bridge 63

This bridge is the lower bridge of a double-decker bridge which carries SB I-95 over Virginia Street, South 14th Street and CSX railroad to WB Downtown Expressway (VA 195). The bridge begins with the connection with Bridge 64, has one abutment and nine piers and is a multigirder structure with 10 simple spans.

- o All Steelwork shall be coated in accordance with SSPC-PA 1.
- O Cleaning shall be in accordance with SSPC SP10 "Near-White Metal Blast" in addition to Section 411.04 General Surface Preparation and Application Standards. Painting shall be in accordance with Section 411.04(B) General Surface Preparation and Application Standards Physical Application.

Bridge 64

This bridge is a one lane ramp which carries SB I-95 over CSX Railroad, E Cary St and Dock St to WB Downtown Expressway (VA 195). Bridge 64 transitions from widening of I-95S to clear roadway. The bridge ends with the connection with Bridge 63, has no abutments and 11 piers and is a multi-girder structure with 10 simple spans.

- o All Steelwork shall be coated in accordance with SSPC-PA 1.
- O Cleaning shall be in accordance with SSPC SP10 "Near-White Metal Blast" in addition to Section 411.04 General Surface Preparation and Application Standards. Painting shall be in accordance with Section 411.04(B) General Surface Preparation and Application Standards Physical Application.

Bridge 65

This bridge is a one lane ramp which carries NB I-95 over both the CSX and NS Railroad to WB Downtown Expressway (VA 195). The bridge ends with the connection with Bridge 63, has no abutments and 20 piers and is a multi-girder structure with 20 simple spans. In addition, Bridge 65, Spans 10 and 11 cross over the Kanawha Canal. In addition, there is one Box girder with access hatch at P6.

ADDENDUM No. 2

- o All Steelwork shall be coated in accordance with SSPC-PA 1.
- O Cleaning shall be in accordance with SSPC SP10 "Near-White Metal Blast" in addition to Section 411.04 General Surface Preparation and Application Standards. Painting shall be in accordance with Section 411.04(B) General Surface Preparation and Application Standards Physical Application.

<u>Interior Box Girder – Pier 6</u>

- All Steelwork shall be coated in accordance with SSPC-PA 1.
- Cleaning shall be in accordance with SSPC SP 6 "Commercial Blast" in addition to Section 411.04 General Surface Preparation and Application Standards. Painting shall be in accordance with Section 411.04(B) General Surface Preparation and Application Standards Physical Application.

Bridge 66

This two-lane bridge is the upper bridge of a double-decker bridge which carries EB Downtown Expressway (VA 195) over Virginia Street, South 14th Street and CSX railroad to NB or SB I-95. The bridge ends with the connections of Bridges 67 and 68, has one abutment and 13 piers and is a multi-girder structure with 22 simple spans. In addition, there are 8 Box Girders with access hatches.

- o All Steelwork shall be coated in accordance with SSPC-PA 1.
- O Cleaning shall be in accordance with SSPC SP10 "Near-White Metal Blast" in addition to Section 411.04 General Surface Preparation and Application Standards. Painting shall be in accordance with Section 411.04(B) General Surface Preparation and Application Standards Physical Application.

<u>Interior Box Girders – Piers 14-21</u>

- All Steelwork shall be coated in accordance with SSPC-PA 1.
- Cleaning shall be in accordance with SSPC SP 6 "Commercial Blast" in addition to Section 411.04 General Surface Preparation and Application Standards. Painting shall be in accordance with Section 411.04(B) General Surface Preparation and Application Standards Physical Application.

Bridge 67

This Bridge is a single lane ramp which carries EB Downtown Expressway (VA 195) over CSX Railroad, E Cary St and E Main St to NB I-95. The bridge starts with the connection from Bridge 66, has one abutment and 17 piers and is a multi-girder structure with 12 simple spans.

- o All Steelwork shall be coated in accordance with SSPC-PA 1.
- O Cleaning shall be in accordance with SSPC SP10 "Near-White Metal Blast" in addition to Section 411.04 General Surface Preparation and Application Standards. Painting shall be in accordance with Section 411.04(B) General Surface Preparation and Application Standards Physical Application.

Interior Box Girders - Pier 10E

- All Steelwork shall be coated in accordance with SSPC-PA 1.
- Cleaning shall be in accordance with SSPC SP 6 "Commercial Blast" in addition to Section 411.04 General Surface Preparation and Application Standards. Painting shall be in accordance with Section 411.04(B) General Surface Preparation and Application Standards Physical Application.

Bridge 68

This Bridge is a single lane ramp which carries EB Downtown Expressway (VA 195) over NS Railroad, CSX Railroad and E Byrd St to SB I-95. The bridge starts with the connection from Bridge 66, has no abutment and 14 piers and is a multi-girder structure with 18 simple spans.

- o All Steelwork shall be coated in accordance with SSPC-PA 1.
- O Cleaning shall be in accordance with SSPC SP10 "Near-White Metal Blast" in addition to Section 411.04 General Surface Preparation and Application Standards. Painting shall be in accordance with Section 411.04(B) General Surface Preparation and Application Standards Physical Application.

<u>Interior Box Girders – Piers 1-2 & Piers 19-20 (B- 65)</u>

- All Steelwork shall be coated in accordance with SSPC-PA 1.
- Cleaning shall be in accordance with SSPC SP 6 "Commercial Blast" in addition to Section 411.04 General Surface Preparation and Application Standards. Painting shall be in accordance with Section 411.04(B) General Surface Preparation and Application Standards Physical Application.

COORDINATION AND SCHEDULING

Contractor shall coordinate all work activities with the Engineer. Contractor shall provide at least seven days' notice prior to starting work on any RMTA structure.

To complete work, Contractor may require access from property owned or managed by parties other than the RMTA. Contractor shall coordinate and schedule with appropriate owner, party or agency work activities on non-RMTA property. In addition, Contractor shall secure

all necessary permits required for site access to perform work. Contractor shall abide by all permits, regulations and guidelines issued by the governing agency.

The Contractor is required to obtain any and all necessary permits or approvals from VDOT for attaching any containment or staging to a VDOT structure.

Upon completion of the use of properties adjacent to or below bridges for storage or work areas, Contractor shall restore the property to a condition similar or equal to that existing before work started. Any costs related to gaining access to property, stabilizing property, sediment control devices and restoring property shall be incidental to the other work items established for the structure.

Contractor shall protect all utilities on Bridges from all work, specifically abrasive blasting operations.

MEASUREMENT AND PAYMENT

Coating for bridges B63, B64, B65, B66, B67 and B68 will be measured and paid for at the contract lump sum price at each location. This price shall include all materials and labor to complete surface preparation and apply a 3-coat system. Environmental Protection and Health Safety will be measured and paid for at the contract lump sum price for each location. Disposal of Material will be measured and paid for at the contract lump sum price at each location. Maintenance of Traffic will be measured and paid for at the contract lump sum price at each location.

Interior Box Girder coating for bridges B65, B66, B67 and B68 will be measured and paid for at the contract lump sum price at each location. This price shall include all materials and labor to complete surface preparation and apply a **2-coat system**, Environmental Protection, Health Safety, and Disposal of Material. Maintenance of Traffic will be measured and paid for at the contract lump sum price at each location.

Payment will be made under;

Pay Item	<u>Pay Unit</u>
Full Bridge Coating (Bridge 63, Type B)	Lump Sum
Full Bridge Coating (Bridge 64, Type B)	Lump Sum
Full Bridge Coating (Bridge 65, Type B)	Lump Sum
Full Bridge Coating (Bridge 66, Type B)	Lump Sum
Full Bridge Coating (Bridge 67, Type B)	Lump Sum
Full Bridge Coating (Bridge 68, Type B)	Lump Sum

Environmental Protection and Health Safety (B63)	Lump Sum
Environmental Protection and Health Safety (B64)	Lump Sum
Environmental Protection and Health Safety (B65)	Lump Sum
Environmental Protection and Health Safety (B66)	Lump Sum
Environmental Protection and Health Safety (B67)	Lump Sum
Environmental Protection and Health Safety (B68)	Lump Sum
Disposal of Material B63	Lump Sum
Disposal of Material B64	Lump Sum
Disposal of Material B65	Lump Sum
Disposal of Material B66	Lump Sum
Disposal of Material B67	Lump Sum
Disposal of Material B68	Lump Sum
Maintenance of Traffic B63	Lump Sum
Maintenance of Traffic B64	Lump Sum
Maintenance of Traffic B65	Lump Sum
Maintenance of Traffic B66	Lump Sum
Maintenance of Traffic B67	Lump Sum
Maintenance of Traffic B68	Lump Sum
Interior Box Girder Coating (Bridge 65, Type B)	Lump Sum
Interior Box Girder Coating (Bridge 66, Type B)	Lump Sum
Interior Box Girder Coating (Bridge 67, Type B)	Lump Sum
Interior Box Girder Coating (Bridge 68, Type B)	Lump Sum

Richmond Metropolitan Transportation Authority Paint Estimate

FOR INFORMATION ONLY

BRIDGES B-66, B-67, B-68, B-65

THE FOLLOWING DATA SUPPORTS THE PAINT ESTIMATE FOR 100% COATING OF

Interior Box Girders

B 66 INT. BOX GIRDERS	28,676 Sq. Ft.
B 67 INT. BOX GIRDERS	1,583 Sq. Ft.
B 68 INT. BOX GIRDERS	5,750 Sq. Ft.
B 65 INT. BOX GIRDERS	210 Sq. Ft.

TOTAL 36,219 Sq. Ft.